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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,446	12/22/2000	Poul Henrik Ahm	1175/63852	1272

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EXAMINER

WEEKS, GLORIA R

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 04/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/720,446	AHM, POUL HENRIK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gloria R Weeks	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/720,446.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Denmark on June 29, 1998. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-14, 19-20 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases "preferably" in claim 13, line 2; "for instance" in claim 14, line 2; "such as" in claim 19, line 3; "such as" in claim 20, line 2; "for instance" in claim 20, line 3; "preferably" in claim 23, line 2; and "preferably" in claim 24, line 3 render the claims indefinite because it is unclear whether the limitations following the phrases are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Objections***

4. Claims 14, 16, 17, 19 are objected to because of the following minor informalities: misspelled word "characterised" in claim 14, line 1; misspelled word "paralle" in claim 14, line 2; misspelled word "characterised" in claim 16, line 1; misspelled word "characterised" in claim 17, line 1; misspelled word phrase "an dthe" in claim 19, line 2; misspelled word "characterised" in claim 20, line 1. Appropriate corrections are required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (USPN 4,427,404) in view of Willis (USPN 3,673,757).

In reference to claim 13, Yamada discloses a packed tape comprising at least one folded tape (T) and a package (9) preferably made of plastic sheet, characterized in that the tape (T) is zigzag folded into at least one oblong stack (figure 1; column 5, lines 65-68; column 6, lines 1-2), but does not disclose whether or not the bendings of the tape are flush with the edges. Willis teaches a tape (19) that is zigzag folded (20) into at least one oblong stack (figures 2-5) in such a manner that some of the bendings of the tape flush with the ends of the stack whereas the remaining bendings are positioned at varying distances therefrom (column 1, lines 71-75; column 2, lines 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the stack of Yamada to include the staggered stack of Willis for the purpose of allowing the layers to be unfolded without hindrance.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (USPN 4,427,404) in view of Willis (USPN 3,673,757) as applied to claim 13 above, and further in view of O'Connor (USPN 6,035,608) and Ito et al. (USPN 4,469,243).

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Regarding claim 14 and its limitations as stated above, the modified package of Yamada in view of Willis discloses packed tape comprising several stacks (Yamada-figure 1) arranged in parallel, and that the package is a box (Yamada-9, 9'), for instance made of cardboard, but does not disclose separating sheets between the stacks. O'Connor teaches a packed tape (12) comprising several stacks (20-23) arranged in parallel (figures 5-6), and that the package (40) is a box, and that separating sheets (62) are optionally inserted between the stacks (column 6, lines 55-65). Ito et al. also teaches a packed tape (12) comprising several stacks arranged in parallel (figure 6), with separating sheet(s) (32) inserted between the stacks. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the stack of Yamada in view of Willis to include the separating sheets of O'Connor or Ito et al. for the purpose of dividing each stack and providing support for each formed stack.

8. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (USPN 4,427,404) in view of Ellis (USPN 5,516,256) and Willis (USPN 3,673,757).

With respect to claim 15, Yamada discloses a method of producing a packed, flexible tape (T) comprising a folded tape (T) and a package (9, 9'), characterized in that the tape (T) is advanced continuously optionally from a tape supply (17) to a packing location (figure 1) where the tape (T) is zigzag folded by virtue of its weight into at least one oblong stack on the bottom (1) of the package (9, 9') formed as a bag or a box, and after the filling of the package (9, 9') the layers of the stack are compressed and the package closed (column 6, lines 3-10, 40-62), but does not disclose side lowering means and some of the bendings of the stack being various distances from the edge of the stack. Ellis teaches a side means (53) used for stacking a material in a zigzag formation. Although Ellis teaches a method of raising a material, it would have been

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obvious to one having ordinary skill in the art at the time the invention was made to rotate the belts in the opposite direction, since it has been held that mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

Willis teaches a tape (19) that is zigzag folded (20) into at least one oblong stack (figures 2-5) in such a manner that some of the bendings of the tape flush with the ends of the stack whereas the remaining bendings are positioned at varying distances therefrom (column 1, lines 71-75; column 2, lines 1-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Yamada to include Ellis's step of using side means for the purpose of lowering the stacking material in a zigzag formation and Willis's step of staggering the stack for the purpose of allowing the layers to be unfolded without hindrance.

In reference to claim 16 and its limitations as stated above, the modified method of Yamada in view of Ellis discloses a side lowering means are formed by substantially vertical, endless, circulating lowering belts (Ellis-38, 60) opposing one another and being arranged at the ends of the stack whereby the zigzagged tape forms bendings (Ellis-72) as the downward courses are tangent to the outermost tape bendings (Ellis-figure 10). Although

Regarding claim 17 and its limitations as stated above, the modified method of Yamada in view of Ellis discloses a method characterized in that the zigzag folding of the tape is carried out by means of at least one tape lowering means (Yamada-52, 53) pivotally suspended (Yamada-50, 51) above the packaging location (Yamada-figure 1) comprising two co-acting endless circulating belts (Ellis 38, 60) passing the tape downwards therebetween, and whereby the zigzag folding is controlled by the oscillating movement of the tape lowering means

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(Yamada-52, 53) in combination with the tape laying speed (Yamada-column 5, lines 62-68; column 6, lines 1-2).

With respect to claim 18 and its limitations as stated above, Yamada discloses a method where the tape is of a width corresponding to maximum 90% of the distance between the walls of the package (9, 9'; figure 1)

9. Claims 19-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (USPN 4,427,404) in view of Ellis (USPN 5,516,256) and Willis (USPN 3,673,757) as applied to claim 15 above, and further in view of O'Connor (USPN 6,035,608).

In reference to claim 19 and its limitations as stated above, the modified method of Yamada in view of Ellis discloses a method characterized in that the zigzag folding and the compressing of the tape (Yamada-T) to be packed is carried out in a compartment (Yamada-figure 1) defined by the lowering belts (Ellis-38, 60) and some guides (Yamada-6, 8), such as plates or bars, and towards the bottom by a package (Yamada-9, 9'), such as a bag, placed on a support (Yamada-1), but does not disclose whether or not the support (Yamada-1) is optionally stepwise, laterally displaceable. O'Connor teaches a method of packing a tape characterized in that the zigzag folding of the tape to be packed is carried out in a compartment (figure 5) defined by some guides (62) on a support (60) whereby after the compressing of the tape the package can be rolled up and closed about the stack at the same time as the compartment is removed (column 6, lines 55-67; column 7, lines 1-8, 25-39). It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Yamada in view of Ellis to include the support of O'Connor for the purpose of supporting the stack while the zigzag stacks are formed.

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Regarding claim 20 and its limitations as stated above, the modified method of Yamada in view of O'Connor discloses a method characterized that the bag (O'Connor-40) used is made of shrink-film (O'Connor-column 5, lines 51-54), and that the package (O'Connor-40), such as the bag, is subjected to a shrinking after its closing, for instance a hot air shrinking.

With respect to claim 21 and its limitations as stated above, Yamada in view of O'Connor discloses a method characterized in that the packing is carried out under vacuum (O'Connor-column 5, lines 51-61)

In reference to claim 22 and its limitations as stated above, Yamada in view of Ellis and O'Connor discloses an assembly used in carrying out the method as claimed above, characterized in that it comprises an upwardly and downwardly open compartment (Yamada-5, 6, 7, 8), the opposing ends of which are provided with side lowering means in form of endless circulating belts (Ellis-38, 58), where the belt courses faces the interior of the compartment move downwards, the assembly further comprising a frame (Yamada-4; column 2, lines 45-51) surrounding the compartment and retaining and optionally distending a package (Yamada-9, 9'), the supporting means (Yamada-1; O'Connor-60) being accommodated below the compartment and the frame and being separately adjustable in height and optionally stepwise, laterally displaceable, (O'Connor-column 7, lines 7-39).

With respect to claim 24 and its limitations as stated above, Yamada in view of O'Connor discloses an assembly wherein the bag (O'Connor-40) is made of shrink film, characterised in that it comprises a compressing means (O'Connor-column 5, lines 51-60) for the stack and a film shrinking equipment.



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10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (USPN 4,427,404) in view of Ellis (USPN 5,516,256) and Willis (USPN 3,673,757) as applied to claim 15 above, and further in view of Reider (USPN 6,071,223) and O'Connor (USPN 6,035,608).

Regarding claim 23 and its limitations as stated above, Yamada in view of Ellis and O'Connor discloses an assembly used in carrying out the method as claimed above, characterized in that it comprises at least one tape lowering means (Yamada-52, 53), which is preferably level adjustable and movable in the vertical direction during operation, and which is pivotally arranged about a point (Yamada-50, 51) of the upper end of the tape lowering means, and which per se comprises two abutting endless circulating belts (Ellis-38, 58), where the opposing belt courses run downwards, but does not disclose an electronic control unit and a height adjustable support. Reider teaches a tape lowering means comprising an electronic control unit for controlling the reciprocating movement of the tape lowering means (). O'Connor teaches a tape packing assembly comprising height adjustable and optionally stepwise lateral displacement of a supporting means (60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the assembly of Yamada in view of Ellis to include the electronic control unit of Reider for the purpose of controlling the tape lowering means, and the support means of O'Connor for the purpose of supporting the stacks of tape.

### *Conclusion*

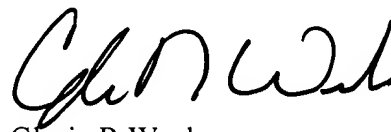
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to attachment for notice of references cited and recommended for consideration.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R Weeks whose telephone number is (703) 605-4211. The examiner can normally be reached on 6:30 am - 5:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on (703) 305-2187. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7769 for regular communications and (703) 308-7769 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1789.



Gloria R Weeks  
Examiner  
Art Unit 3721

grw  
April 16, 2002



Rinaldi I. Rada  
Supervisory Patent Examiner  
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